

1. A glass comprising in % by weight, based on oxide: SiO_2 about 78.5 - about 79.5, B_2O_3 about 13.0 - about 14.0, Al_2O_3 about 2.0 - about 3.0, Na_2O about 4.5 - about 5.5, K_2O 0 - about 0.6, and optionally at least one fining agent; wherein the glass is colorless.

2. The glass according to claim 1 incorporated into a teapot, a coffee machine jug or a baby-milk bottle.

3. The glass according to claim 1, further comprising: no more than about 0.5% by weight of a non-interfering oxide.

4. The glass according to claim 1, wherein the glass has a coefficient of linear thermal expansion $\alpha_{20/300}$ between about 3.5 and about $3.7 \cdot 10^{-6}/\text{K}$, a working point V_A of \leq about 1220 °C, a modulus of elasticity of \leq about 65 GPa, a hydrolytic resistance in accordance with DIN ISO 719 in hydrolytic class 1, an acid resistance S in accordance with DIN 12 116 in acid class 1, and a caustic lye resistance L in accordance with DIN ISO 659 in lye class 2.

5. A glass comprising in % by weight, based on oxide: \checkmark
about 78.5 to about 79.5 SiO_2 ;
about 13.0 to about 14.0 B_2O_3 ;
about 2.0 to about 3.0 Al_2O_3 ;
about 4.5 to about 5.5 Na_2O ; and

a decolorant.

6. A process for making glass comprising melting together:
about 78.5 to about 79.5 weight percent based on oxide SiO_2 ;
about 13.0 to about 14.0 weight percent based on oxide B_2O_3 ;
about 2.0 to about 3.0 Al_2O_3 weight percent based on oxide; and
about 4.5 to about 5.5 Na_2O weight percent based on oxide; wherein the glass is
colorless.

7. The process according to claim 6 further comprising heating the oxides in a
heated melting unit to no more than about 1620 degrees Celsius.

8. A glass consisting essentially of in % by weight, based on oxide:
about 78.5 to about 79.5 SiO_2 ;
about 13.0 to about 14.0 B_2O_3 ;
about 2.0 to about 3.0 Al_2O_3 ;
about 4.5 to about 5.5 Na_2O ; and
at least one fining agent.

9. A thermal shock-resistant container comprising the glass according to claim 5.

10. A glass made by the process according to claim 6.

11. A glass according to claim 1, further comprising a decolorant.
12. A process according to claim 6, wherein the glass further comprises a decolorant.
13. A glass according to claim 5, wherein the decolorant is Er_2O_3 , CoO , or a combination thereof.
14. A glass according to claim 11, wherein the decolorant is Er_2O_3 , CoO , or a combination thereof.
15. A process according to claim 12, wherein the decolorant is Er_2O_3 , CoO , or a combination thereof.
16. A glass according to claim 1, wherein the optional fining agent is As_2O_3 , Sb_2O_3 , NaCl , KCl , or a combination thereof.
17. A glass according to claim 3, wherein the non-interfering oxide is MgO , CaO , or a combination thereof.

19. A glass according to claim 1, consisting essentially of SiO_2 about 78.5 - about 79.5, B_2O_3 about 13.0 - about 14.0, Al_2O_3 about 2.0 - about 3.0, Na_2O about 4.5 - about 5.5, K_2O 0 - about 0.6, in % by weight based on oxide, and a fining agent.

20. A teapot, coffee machine jug or baby milk bottle consisting essentially of a glass according to claim 1.

21. A glass consisting of in % by weight, based on oxide:

SiO_2 about 78.5 - about 79.5;

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B_2O_3 about 13.0 - about 14.0;

Al_2O_3 about 2.0 - about 3.0;

Na_2O about 4.5 - about 5.5; and

K_2O 0 - about 0.6.